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10/757,878	01/14/2004	Jeffrey S. Meteyer	D/A3359	5192
<div>7590 08/20/2007</div> <div>Ortiz & Lopez, PLLC P.O. Box 4484 Albuquerque, NM 87196-4484</div> <div>EXAMINER KEATON, SHERROD L</div> <div>ART UNIT PAPER NUMBER</div> <div>2174</div> <div>MAIL DATE DELIVERY MODE</div> <div>08/20/2007 PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/757,878

Applicant(s)

METEYER, JEFFREY S.

Examiner

sherrod keaton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the filing of June 11, 2007 Claims 1-20 are pending and have been considered below:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-7, 10, 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Costello et al (5964719).

Claims 1 and 10: Costello discloses a method and system comprising:

- a.) accessing an electronic portal that collects and provides ergonomic tool data to a user of said portal (Column 4, Lines 35-40), and
- b.) compiling ergonomic data based on physical input provided by user to said electronic portal in order to generate ergonomic tool data to user based on physical input (Column 2, Lines 7-65).

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Claims 4 and 13: Costello discloses a method and system as in Claim 1 above and further discloses generating specific ergonomic data in response to compiling ergonomic data based on physical input provided by user to electronic portal in order to generate ergonomic tool data to user based on physical input (Column 2, Lines 7-65), (Column 3, Lines 1-11).

Claims 5 and 14: Costello discloses generating specific ergonomic data in response to compiling ergonomic data based on physical input provided by user to electronic portal in order to generate ergonomic tool data to user based on physical input as in Claim 4 and 13 above and further discloses specific ergonomic data comprising a plurality of output variables representative of weight, twist, grasp, pull, push and motor skills of user (Column 2, Lines 65-67), (Column 3, Lines 1-11).

Claims 6 and 15: Costello discloses generating specific ergonomic data in response to compiling ergonomic data based on physical input provided by user to electronic portal in order to generate ergonomic tool data to user based on physical input as in Claim 4 and 13 above and further discloses analyzing and comparing said specific ergonomic data to data maintained within a database to thereby provide particular tool data matching said specific ergonomic data associated with said user. (Column 4, Lines 27-40).

Claims 7 and 16: Costello discloses a method and system as in Claim 1 above and further discloses generating a plurality of risk factors for said user based on an analysis of ergonomic data compiled based on physical input provided by said user to said electronic portal in order to generate ergonomic tool data to said user based on said physical input (Column 2, Lines 24-65).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3, 8, 9, 11, 12, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costello et al (5964719) in view of Walker et al (US 6452584 B1).

Claims 2 and 11: Costello discloses a method and system as in Claims 1 and 10 above but does not explicitly disclose

a.) generating a three dimensional interactive graphic for display on a display screen for said user. However Walker discloses a system for data management based on hand gestures and further discloses the three dimensional interactive graphic display (Column 3, Lines 4-17);

b.) prompting said user to interact with said three-dimensional interactive graphic utilizing a user input device (Column 2, Lines 21-39), (Column 3, Lines 4-17); and

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c.) collecting ergonomic data from said user based on input provided by user through said user input device in association with said three dimensional graphic displayed on said display screen for said user (Column 1, Lines 55-60), (Column 2, Lines 21-39), (Column 3, Lines 4-17).

Therefore it would have been obvious to one having ordinary skills in the time of the art to add the interactive three-dimensional graphic to Costello. One would have been motivated to add the interactive graphic because it adds clarity to instructions. Now the instructions can be relayed verbally or visually.

Claims 3 and 12: Costello and Walker disclose a method and system as in Claim 2 and 11 and Costello further discloses a user input device that comprises a motion detector configured with a plurality of pressure and weight sensors (Column 2, Lines 50-59), (Column 3, Lines 44-67), (Column 4, Lines 1-14).

Claims 8 and 18: Costello disclose generating a plurality of risk factors for said user based on an analysis of ergonomic data compiled based on physical input provided by said user to said electronic portal in order to generate ergonomic tool data to said user based on said physical input as in Claims 7 and 16 above and further discloses

- a.) a high risk factor, wherein ergonomic injury is likely to said user (Column 2, Lines 60-67), (Column 4, Lines 14-40);
- b.) a medium risk factor, wherein on a short term basis, a substantial risk to said user is unlikely to occur (Column 2, Lines 60-67), (Column 4, Lines 14-40);

c.) a limited risk factor, wherein said user faces a highly unlikely risk of injury (Column 2, Lines 60-67), (Column 4, Lines 14-40);

but Costello does not explicitly disclose,

d.) the plurality of risk factors being graphically represented for user on a display screen as a graphical representation of the human body. However Walker does disclose a graphical representation on a display screen. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine graphical display with the risk factors of Costello. One would have been motivated to add the graphical display to provide visual display in addition to numerical and graph displays to show user multiple aspects of the ergonomic data.

Claim 17: Costello discloses generating a plurality of risk factors for said user based on an analysis of ergonomic data compiled based on physical input provided by said user to said electronic portal in order to generate ergonomic tool data to said user based on said physical input as in Claim 16 above, but does not explicitly disclose a data input glove and glove portion, which can be worn on a hand of a user and data input gloves generating data control signals. However Walker discloses a system for data management based on hand gestures and further discloses a data input glove and glove portion, which can be worn on a hand of a user and data input gloves generating data control signals (Column 1, Lines 18-65), (Column 4, Lines 7-33). Therefore it would have been obvious to one having ordinary skills at the time of the invention to incorporate the data glove in Costello. One would have been motivated add a data

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glove to have easier interaction with virtual environment than using keyboards, mice, joysticks, etc.

Claim 9 and 19: Costello discloses a method and system as in Claims 1 and 10 above but does not explicitly disclose a search engine associated with the electronic portal, wherein search engine is accessible by said user through electronic portal to automatically identify tool data that are potentially ergonomically appropriate. However Walker does disclose allowing other programs to run with the virtual reality program for processing data. Therefore it would have been obvious to one having ordinary skill at the time of the art to allow a processing data program to take Costello ergonomic data and find appropriate data for user. One would have been motivated to have to program in order to eliminate multiple steps. This adds to the efficiency of the program.

Claim 20: Costello discloses a system comprising:

- a.) an electronic portal that collects and provides ergonomic tool data to a user of said portal Costello (Column 4, Lines 35-40). Costello does not disclose an electronic portal that can be displayed graphically on a display screen. However Walker does disclose a portal being displayed graphically (Column 3, Lines 4-17); and Walker also discloses:
- b.) a user input device, wherein said user is prompted via said display screen to interact with said three-dimensional interactive graphic utilizing said user input device. Walker (Column 2, Lines 21-39), (Column 3, Lines 4-17) not disclosed in Costello; Therefore it

would have been obvious to one having ordinary skills in the time of the art to add the interactive three-dimensional graphic to Costello. One would have been motivated to add the interactive graphic because it adds clarity to instructions. Now the instructions of how to interact with the input device can be relayed verbally or visually.

c.) a compilation module for compiling ergonomic data based on physical input provided by said user to said electronic portal through a user input device in order to generate ergonomic data to user based on said physical input, wherein specific ergonomic data comprises a plurality of output variables representative of weight, twist, grasp, pull and motor skills Costello (Column 2, Lines 65-67), (Column 3, Lines 1-11);

d.) an analysis module for analyzing and comparing specific ergonomic data to data maintained within a database Costello (Column 4, Lines 27-40); and

e.) generating a module for automatically generating a plurality of risk factors for user based on analysis ergonomic data compiled in response to physical input provided by user to electronic portal via user input device Costello (Column 2, Lines 24-65).

Response to Arguments

5. **Argument of Claims 1 and 10:** Applicant's arguments filed 6-11-07 have been fully considered but they are not persuasive. In response to applicant's argument that reference does not show generating ergonomic tool data, it is noted Ergonomics is

defined as a design, which can help minimize fatigue and discomfort. The reference collects data and looks for harmful patterns that can cause stress which leads to fatigue and discomfort and also points out an improvement on testing ergonomics in a work piece design (Page 2, Lines 7-15).

Argument of Claims 4 and 13: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument that reference does not show specific ergonomic data, it is noted that once a user is tested on the apparatus that information is specific to that user and is compared to specific data to determine different type of stress levels.

Argument of Claims 5 and 14: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument that reference does not show data representation of weight, twist, grasp, pull, push and motor skills, it is noted that reference cites activity of a muscle and positions of a body joint which covers which movements as cited by the applicant (Page 3, Lines 1-10).

Argument of Claims 6 and 15: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument that reference does not show comparing data in a database it is noted the references' program looks at a stored

data to be analyzed for harmful patterns. A database is a collection of stored records or files organized for a particular purpose.

Argument of Claims 7 and 16: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument that reference does not show risk factors, it is noted that reference looks to identify potential harmful patterns or "risk factors" based on analyzed data. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. In this case high, medium and low risk factors are not mentioned in this claim.

Argument of Claims 2 and 11: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument it is noted that both Costello and Walker use an interactive glove for manipulation of data and the type of data is in material. Walker also discloses an interactive computer animation, which, is three-dimensional (vertical, horizontal and temporal). In response to the argument that Walker does not collect data it is noted Walker provides the three-dimensional interactive aspect of the claimed invention while Costello has the collecting of ergonomic data and in combination they cover the limitations of the claims.

Argument of Claims 3 and 12: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument that the reference does

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not have a motion detector, it is noted that the reference does have sensor for activity of muscles (activity would include movement, pressure etc...) and angular position of body joints and these different positions require some type of movement, which is registered by the references invention.

Argument of Claims 8 and 18: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument that Costello does not disclose a plurality of risk factors, it is noted that Costello looks at harmful patterns and stresses and this data will be sense to different levels patterns and stress. All data will not be analyzed the same some data may cause higher stress meaning higher risk or less stress showing a lower risk. Further Walker discloses data being processed that can be in the representation of a hand or other object (e.g. body representation) that can be continuously manipulated (Column 4, Lines 1-5). By combining the two references the ergonomic data gathered by Costello could be manipulated and displayed in an interactive form as disclosed by Walker.

Argument of Claim 17: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument, it is noted that Walker's signals generated the data glove which uses a data cable (Column 6, Lines 6-21) can be used for any purpose and in combination with Costello the data would be collected and analyzed for harmful stress patterns.

Argument of Claims 9 and 19: Applicant's arguments have been fully considered but they are not persuasive. In response to applicant's argument that no search engine is used in Walker, it is noted that data management involves acquisition, storage, retrieval, and query or search of data. Costello looks at the ergonomics to see if a particular work piece design would be appropriate meaning less stressful or non-appropriate meaning causing more stress (Column 2, Lines 7-15) and the analysis of the data provides real-time information as to if the work-piece is ergonomically appropriate.

Argument of Claim 20: Applicant's arguments have been fully considered but they are not persuasive. In regards to the first argument, the applicant does not explicitly disclose what an electronic portal is and only describes possible examples therefore the user interface in Costello as cited by the applicant can serve as an electronic portal and it is graphically displayed. Walker's interactive computer animation also serves as an electronic portal. Costello collects data and looks for harmful patterns that can cause stress which leads to fatigue and discomfort and also points out an improvement on testing ergonomics in a work piece design (Page 2, Lines 7-15). Costellos' program also looks at a stored data to be analyzed for harmful patterns. A database is a collection of stored records or files organized for a particular purpose. Finally, it is noted that Costello looks to identify potential harmful patterns or "risk factors" based on analyzed data.

Conclusion

6. Applicants amendments necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-

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1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KRISTINE KINCAID can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLK

8-10-07

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